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ABSTRACT

This third report of the Commission on Public School Personnel Policies in Ohio follows up on its first report (SP 006 262) which recommended that school districts build flexible staffing arrangements into their own school organizations. This report centers on descriptions of flexible staffing arrangements made in the Ohio schools. Flexible staffing is defined as a group of teachers working cooperatively to determine the learning needs of a group of students and to determine plans to help those needs. The two common patterns of flexible staffing are described as team teaching and differentiated staffing (in which there is a variety of roles on each instruction team). The report reviews problems of cost, physical facilities, in-service training, and implementation strategies. Appendixes include information sources, project summaries, and a superintendents' survey. (JA)

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ORGANIZING FOR LEARNING II: PATHS TO MORE FLEXIBLE STAFFING

The Third Report of the

COMMISSION ON PUBLIC SCHOOL PERSONNEL POLICIES IN OHIO

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SP 006 263

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Preface

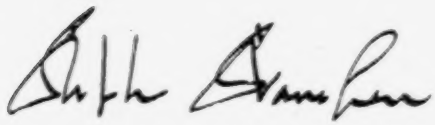
This is the third in a series of reports by the Commission on Public School Personnel Policies in Ohio. The Commission's first report, "Organizing for Learning," outlined basic steps that can be taken to improve the utilization of teaching personnel in Ohio's public schools. In that report the Commission urged school districts to build flexible staffing arrangements into their own school organizations and recommended a program of state aid to help finance the start-up cost for demonstration projects. In this report, the Commission presents more detailed findings from its study of key districts which have already implemented flexible staffing arrangements. This is done in the hope that these findings will aid and encourage school administrators, school board members, and citizens to implement flexible staffing arrangements in their own schools.

The private and community foundations in Ohio that appointed and funded the Commission have a long history of concern for public school education and a fundamental belief that results of the educational process depend in great part on the basic competence, training, and utilization of the teaching staff. They established this state-wide Commission of laymen for the purpose of determining ways of achieving optimum quality and use of staff and enhancing the attractiveness of teaching as a career.

The Commission expresses special appreciation to the many teaching personnel and administrators who were generous with their personal experiences and evaluations - and in many cases with considerable time from very busy schedules - to help provide information for this report. We wish to thank the 422 respondents from across the state who answered our survey of superintendents regarding school organization.

We particularly wish to thank the more than 100 people interviewed in the school districts of Athens, Centerville, Cleveland, Dayton, Mentor, North Olmsted, Princeton, Reading, Toledo and Xenia. Almost without exception, they shared with our staff their observations, experiences and even personal feelings about their work with openness which went far beyond mere courtesy.

We can report that there are a great many sensitive and talented people in the teaching ranks throughout the state.



Stephen Stranahan
Chairman

Introduction

This report may surprise you. It does not catalogue the ills and deficiencies in Ohio public schools or uncover any new crises in public education. It does not paint any hopeless pictures.

This report does detail some programs underway in a number of Ohio school districts that are enabling students to learn more nearly to the maximum of their ability. It is intended to be a kind of "roadmap" to the flexible staffing arrangements which are enabling this kind of educational success to take place. It describes the experiences that students, teachers, administrators, and parents are having with these programs - the opportunities and pitfalls they have encountered, and some of the solutions they have discovered.

In describing what these people have learned by trial and error in implementing flexible staffing in their own schools, it is hoped that readers will be intrigued, stimulated, challenged, and encouraged to develop flexible staffing in their own schools. We believe that the practices described in this report - and the community efforts which have gone into making them successful - are some of the most hopeful indications in sight that the quality of public education can and will be improved to meet the needs of all children.

The Commission's purpose has not been to produce formal evaluations of individual programs, but to conduct a general exploration of innovations in staff utilization. Wherever possible we have drawn upon existing evaluations. These have been supplemented with perceptions, observations, and judgments of the persons most directly involved in implementing these programs, the teaching personnel and administrators.

This detailed information on flexible staffing in Ohio schools comes primarily from interviews with teaching personnel, building administrators, and central office administrators in ten Ohio school districts. The interviews were conducted by members of the Commission staff in April, May, and early June, 1971. The districts were selected to represent a variety of approaches to flexible staffing as well as diversity in district size, wealth, and

geographic location. In the main, the districts were selected because the programs were judged to be successful although, in reality, the degrees of success ranged from quite high to very questionable.

In each school, the staff tried to interview approximately one fourth of the teaching personnel in each teaching role, all of the building administrators, and all of the central office administrators with line responsibility for the schools involved. These quotas were reached, except that teaching personnel were undersampled in one district (where the program was judged to have little impact on classroom performance) and only seven of the ten superintendents were interviewed. However, in all districts the central office administrators with line responsibility for the programs were included. Board members were also interviewed in three of the ten districts.

Different questions were asked of teachers, teacher-aides, and administrators, and the same questions were used in all districts. The questions were open-ended, and effort was made to give those interviewed as much opportunity as possible to answer fully and to describe their experiences in the terms most familiar to them.

Valuable information for this report was also obtained from a questionnaire sent to superintendents in all 631 Ohio school districts. Approximately 67% (422) of the questionnaires were filled out and returned, a very high rate of return for a mail questionnaire. In addition, the staff collected many useful impressions and suggestions from informal visits with teachers and administrators in over 60 Ohio school districts.

The Commission does not claim that its study is exhaustive; new information is continually becoming available as more districts adopt flexible staffing and more evaluations are completed. We do believe that we have collected sufficient information to conclude positively that, even in the early stages of development, flexible staffing offers many clear advantages over conventional patterns of school organization.

The goal of modern education must be to enable each individual student to learn to the maximum of his ability. The challenge to any school system is to organize its resources and talents in the most effective way possible to move toward that goal.

Community people and school people have an important stake in that task and invaluable resources to contribute. Our desire as a Commission is to invite and urge all Ohio citizens - community people and school people - to take the initiative to see that their own schools are organized with the kind of flexible instructional programs that can enable every student to move most effectively toward this goal.

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I FLEXIBLE STAFFING: WHAT IT CAN MEAN TO A SCHOOL PROGRAM

At the Steven Howe Elementary School in the Glenville area of Cleveland, a first-grader puts up a flag on his desk. His "floater teacher" comes over, checks the scores entered in his math booklet by the teacher-aide, marks a new prescription in his portfolio, and chucks him under the chin. He grins, grabs his portfolio, and hurries upstairs to the instructional materials center for a new assignment. On the way he calls out to the principal: "Hey, Mrs. Spencer - I finished level two today!"

At the Lake School in Mentor, a teaching intern who has just finished her sophomore year at Cleveland State University goes over her lesson plan with her master teacher. In this "lesson," ten eight and nine-year-olds will sit on the carpeted floor in one corner of the "learning center" and work on word-recognition skills with flash cards. The intern, who will go back to Cleveland State with a year's teaching under her belt, says, "Some of those education professors are going to have to watch out when I start asking questions!"

At the Westwood Elementary School in the Dayton inner-city, a young white teacher talks with her black team leader. She cannot "reach" one of her black fourth-grade boys. He is a year older than his classmates and big for his age. He does nothing all day but frown and look out the window. The team leader asks if she can "borrow" him for a couple of days. Three weeks later she asks for him again. There begins a pattern in which the boy is periodically "traded" back and forth between two teachers with very different personal styles. Sometimes he works with a group in the other class. Sometimes he just gets a little encouragement and attention. Both teachers become "his teacher." Six months later he has made a year's progress in reading and is almost caught up with his age group. The team leader says, "For the first time in over fifteen years of teaching, I can see results from what I am doing."

At the Martin Luther King, Jr. Elementary School in Toledo, a unit leader looks in on two groups of her first-graders. In one room, a staff teacher helps boys and girls measure and mix ingredients to bake a cake. In the other, the building engineer supervises the final assembly and decoration of six scooters made from roller skates. The boys and girls will try them out in a parade around the school this afternoon and then take them home. "We got one wall between classrooms knocked down," she says. "I wish we could knock them all down."

At an elementary school in Xenia, a principal said, "I've had to make some changes. I've had invaluable help from my team leaders. I've had to learn to let teachers make some decisions, and that my ideas may not always be best. I used to think that I had to keep 'busy' all day to earn my money. Now I've learned to delegate. The building maintenance gets done just as well without me, maybe better. I almost never have to handle any discipline problems any more. The most important thing for me to do may be to look out the window for an hour and think about a problem, or to sit at my desk and read a book about curriculum, or to teach a class while a team plans. And do you know what? I am more involved in developing the instructional program of this school than I ever have been before."

In each of these schools, there is strong emphasis on students as individual learners. Students and teachers are intimately involved in learning situations. Students, teachers, and parents get great satisfaction from the school programs. In each school a flexible organization is the foundation which makes these results possible.

Concepts and Effects

Flexible staffing is a way of organizing schools. Its objective is to match the capabilities of teachers and the resources of schools to the needs of students, enabling each individual student to learn to the maximum of his ability.

As pointed out in the Commission's first report, schools organized in the traditional manner are poorly equipped to individualize instruction. The typical pattern is to divide school buildings into compartmentalized classrooms, egg-crate fashion, with one teacher for a class of 25 to 35 students in each self-contained

classroom. In such a setting there are severe limits on the amount of grouping a single teacher can achieve.

In an effort to overcome the limitations of the self-contained classroom, the most common practice has been to assign children to classes according to "ability." There are a number of objections to this practice. Whereas children are usually more advanced in some subject areas than others, ability grouping treats them as if they are equally skilled (or unskilled) in all areas. Children also tend to get frozen into their original groups, even though an individual's learning readiness and progress usually move in uneven spurts during the course of a year. Furthermore, the social stigma attached to such "tracking" plans can have very undesirable consequences for children's feelings of pride and self-worth. Because tracking segregates learners according to academic performance, children can easily become labeled as "bright" or "dull" both in their own minds and in the minds of their teachers and fellow students. In some cases, tracking has also produced racially segregated classes within integrated schools.

Most school people know that in traditional self-contained classrooms, teachers - even the very skilled and dedicated - have not usually been able to individualize instruction effectively. Rather, all students with the same birthdate have tended to be treated alike, in assembly line fashion, with little allowance for differences in ability, interest, and personal style of learning. Teachers, too, have tended to be treated alike - as if all with similar academic credentials and years of experience have the same educational interests and abilities.

Many of the limitations inherent in self-contained teaching can be overcome through fundamental reorganization of the teaching and administrative roles in the school. In a flexible staffing organization, a group of teachers work cooperatively to determine the learning needs of a group of students and then to plan the best way to work as a team in meeting those needs. Plans are continually changed as learning proceeds and new needs are determined. Teaching is done in small groups, large groups, and even on a one-to-one basis, with class composition changed frequently to meet changing requirements of individual students. Students are free to move ahead in each subject area as quickly

as they are able. This movement helps prevent gifted children from being frustrated, as often happens when they are always together in the same class. The result is more individualized instruction and a better prospect of enabling each child to develop to his full potential in both the cognitive realm of intellectual skills and the affective realm of attitudes and feelings.

Flexible staffing is an unusally important innovation because it is strategic to many other educational innovations. Many desirable improvements in curriculum and teaching practices cannot take place easily, if at all, in the traditional self-contained classroom. The one innovation which can unlock the way to the most improvements in educational practices, we believe, is to break teachers and classes out of their isolation in the single-teacher, self-contained classroom, through flexible staffing.

When a school staff is organized flexibly, school activities become more purposeful. In most schools today, much of the routine is traditional. Many things are done with little particular thought as to why except that they are the familiar ways. However, when a group of teachers begins to diagnose needs and plan instructional activities, they have to consider and reach agreement on what they are trying to accomplish. Traditional practices get questioned. As new instructional plans have to be made, the group is stimulated to evaluate their progress toward their goals.

Working in groups also provides more personal support for individual teachers. Many teachers told us that they are stimulated by the opportunities to interact with adults during the day, instead of being isolated with a group of children. They get new ideas from each other and observe other teaching styles. They can work in the subject areas in which they have the most interest and ability. Teachers can compare observations and evaluations of individual pupils and get help in case of difficulty in reaching a particular student.

With a team organization, beginning teachers can gradually assume teaching responsibility as they gain experience and can easily turn to more experienced teachers for examples and counsel. In conferences with parents, a team can present a manysided evaluation of student performance and behavior, and the parent is not limited to the perceptions and style of a single teacher.

Flexible staffing increases the opportunities for teachers to perform the professional tasks for which they have trained. Freed from many clerical, non-instructional, and often petty duties, they can devote more of their valuable time and energy to the professional role of developing better instructional programs, while non-professional tasks are performed by para-professional and clerical personnel. Salary schedules may also reflect these differences.

Flexible staffing also has many benefits for school administrators. Student "discipline problems" can often be handled more effectively and easily by the teaching teams. Building administrators can work with a small number of teams, rather than dissipating their efforts by trying to supervise, evaluate, and counsel a large number of individual teachers. Consequently, they have a real opportunity to become involved in instructional planning and to exert genuine instructional leadership for the school.

Students are enthusiastic about these schools. This was reported by sixty-eight of the teachers interviewed. Only two said that students do not like their teaming arrangements. Teachers in several schools told of children who did not want to stay at home for illness and school holidays. In almost every school visited, teachers quoted parents to the effect that their children were enjoying school for the first time.

Some of the most dramatic differences between the new classrooms and the old are in the *attitudes* of teachers. One teacher interviewed said "I've had to change. I was what you call a traditional teacher. I knew I had to do a certain amount of reading, math, etc., in 315 minutes in the day."

Another said: "I think I've become a lot more creative. I sort of have the right and ability to choose what I'm doing. . . I don't feel the least bit pressured in the team. I only feel pressured when I have to leave them and go to a meeting."

Teachers were asked if they were doing anything substantially different in their own style of instruction from what they did before. One teacher said "planning for every day and every child," rather than the kind of "hit and miss" planning done before. She added, "then you have to start digging for materials.

You're more aware of things - of materials, techniques. You explore and share with the team. . .Mostly we are using things we had, but in new ways and using things that weren't being used. We are using lots of audio-visual aids we didn't use before."

Another teacher, commenting on effects on children and teachers, said: "I'm very sold on it (i.e., the teaming arrangement in her school). I think it gets people out in the open. . . I think it makes children more independent. Lots of times they're shy. This gives them self-confidence. It is just good for them to get out of their seats and move around."

Other teachers made these observations:

"The thing they like is the changing classes. They say you trust them more."

"This is a much freer program for children. They develop more as individuals, as they are in contact with more people and groups."

"Our discipline problems are much less because the children like what they are doing."

"If I had a choice, I would want my children to be in a school like this."

"We are more productive in terms of the affective domain - in values and attitudes and how they feel about me and I about them. I think they feel less frustrated in learning. I think they are happier. I think they are learning things they will never forget. It is more meaningful."

"I have picked up new techniques. The day goes quickly. I can see all the other things go on. It is stimulating. The child has a better chance - two or three people can put their heads together to diagnose problems."

One teacher in an inner-city school said that the strongest point of their program was "our children - the fact that they are independent and self-reliant - they are enjoying what they are doing - the fact that they are worldly sophisticated, if not academically."

Some Typical Plans

There are two common patterns of flexible staffing: team teaching and differentiated staffing. Each can take a variety of forms.

In a simple form of team teaching, several teachers work together as a group or team to conduct the instruction for a group of students in one or more subject areas. Students may be grouped by grades, or assigned in multi-age groups. Usually one teacher is designated the team leader, although the job may be rotated from time to time and some teams even function without a designated leader. The teachers do not simply teach cooperatively or take turns teaching each other's classes, but actually plan together and implement the instructional program for a common group of students.

In a more elaborate form of team teaching, the team may be assisted by one or more teacher-aides. These aides perform clerical duties, supervise non-instructional activities, and may help implement instruction prescribed and supervised by certificated teachers, such as tutoring slow learners or using flash cards with small groups. About sixty-six percent of the superintendents responding to the Commission's survey questionnaire reported that they have paid aides in their districts, and sixty-two percent of these also reported having team teaching or differentiated staffing.

"Differentiated staffing" refers to a type of team teaching in which there is a variety of roles on each instructional team – such as master teacher, staff teacher, assistant teacher, and clerical aide. There also is a differentiated salary structure with different personnel receiving different rates of pay according to the extent of their duties and responsibilities in the team. The number of levels in the organization and the precise designation of duties and titles vary from district to district. About ten percent of the respondents to the survey reported some form of differentiated staffing in effect in their district, but observations and interviews conducted by the Commission suggest that the actual figure for full-fledged differentiated staffing programs is probably much lower.

One example of a team teaching plan is the "Multi-Unit School" plan. Developed initially by Professor Herbert J. Klausmeier under the auspices of the University of Wisconsin Research and Development Center for Cognitive Learning, it has been adopted with some variations in the Martin Luther King, Jr. Elementary School in Toledo. It is also being used in

demonstration projects in a number of Ohio school districts under the coordination of the Ohio State Department of Education.

In addition to organizing teachers into teams, the multi-unit plan calls for continual in-service consultation and training for the teaching staff provided by faculty consultants from teacher-training institutions. University consultants help the staff of a specific school to plan, develop, and troubleshoot the instructional program. In this process, school staffs have the opportunity to learn more about learning methods and curriculum suitable for their own program, and liaison personnel from teacher-training institutions have opportunity to become better acquainted with the particular needs of team teaching staffs.

An adaptation of the multi-unit school plan is called Individually Guided Education (I.G.E.). This plan is being fostered by the Institute for Development of Educational Activities, Inc., |I|D|E|A|, an affiliate of the Charles F. Kettering Foundation. The I.G.E. format calls for group planning at several levels. The team leaders, with the school principal, form an Instructional Improvement Council to help support and coordinate the instructional plans of the various teams. The I.G.E. plan also organizes principals and representatives from among the team leaders into regional "leagues" to compare notes and developments in other schools. This provides a forum, broader than the individual building, to suggest solutions to problems and to help sustain the philosophical objectives of the program.

Some forms of flexible staffing do not, strictly speaking, have teaching teams. One programmed-instruction system in mathematics, the Individually Prescribed Instruction program (I.P.I.), designed by Research for Better Schools, Inc., is being tried in schools in Cleveland and Parma. It calls for specialists to assist the regular classroom teacher during the periods of math instruction. One "floater" teacher assists the regular teacher in diagnosing student needs and prescribing programmed materials, and two teacher-aides check student answers against a master answer book. This program also calls for a centralized library of programmed materials in each building, manned by aides.

At Athens High School, one of only a few flexible staffing programs at the secondary level in Ohio, a modular scheduling plan is used in an effort to tailor instruction to individual student needs. The school year is divided into four nine-week terms, and courses are organized into five phases or levels of instruction, rather than into conventional grades. At the beginning of each term, the student, with faculty advice, chooses the "phase" in each subject appropriate for him at the time. Instruction in most courses is conducted in a combination of large, medium, and small groups. Students are also encouraged to propose individual study projects. The faculty of each subject-area "department" plan the courses to be offered during a three-year period. A computer makes out the schedules for all students and teachers. "Unscheduled" time is built into each student's program, to enable him to pursue his own individual needs and interests through supervised individual study.

At the Princeton Junior School, an attempt has been made to create "small schools" within a large school by assigning a common group of 150 students to a core group of five teachers, one in each major subject area. In this way, a "team" of teachers is responsible for the instruction of an individual child and the teams can be brought together easily for parent conferences. This instruction should not be called "team teaching", however, as each teacher plans and conducts his own classes, and instruction is essentially self-contained.

As one can see from these descriptions, there is great opportunity for variety in staffing and curriculum innovations under plans of flexible staffing. Schools typically evolve their own programs, with their own combinations of educational objectives, curriculum, and instructional styles, and rarely are any two exactly alike.

Schools which adopt flexible staffing do not simply exchange a new orthodoxy for an old one. Rather, they make it possible to change school programs continually as new instructional techniques are developed and as their own student needs change.

Flexible staffing is not just a "frill." It is the *foundation* of a truly effective school.

II SIX COMMON OBJECTIONS: MYTH OR REALITY?

Many educators interested in the principles of flexible staffing are concerned about possible obstacles to implementation. In the Commission's survey and in conversations with administrators and academicians across the state, six fears were commonly expressed: (1) that flexible staffing is new and untried, (2) that it would cost too much, (3) that it would require new physical facilities, (4) that teachers might be unwilling or unable to do it, (5) that community attitudes might be unfavorable in many school districts, and (6) that it would not work with "the kind of students we have."

The Commission believes that these are important concerns. Each will be examined in turn. Although these "obstacles" cannot be completely discounted, the Commission believes they can be surmounted in most instances, and usually with less difficulty than even many advocates of new plans envision.

An "Untried" Idea

Although flexible staffing practices are relatively new, they are rapidly losing their "untried" aspect. Educational researchers have experimented with team teaching for over a decade. There are statewide programs to implement team teaching in Colorado, Wisconsin, North Dakota, and Hawaii, and pilot projects in school districts in almost every state. Fully 62% of the Ohio superintendents responding to the Commission's survey reported that one or more of these innovative practices is being used in their districts. (Item 3 Appendix A.) Three-fourths indicated that they find one or more of these practices desirable. (Item 5 Appendix A.)

Wariness of the new and unknown is a usual reaction to social innovations, and flexible staffing is no exception. Those who are legally and politically accountable for the results are likely to be especially cautious. In Ohio, attitudes of school

superintendents toward flexible staffing innovations seem clearly associated with the *size* of the school district - the larger the district, the more likely the superintendent to express approval. Most of the superintendents in large districts expressed approval of the innovations listed in the Commission's survey; only a minority of superintendents in the smallest districts expressed approval. Interestingly, in districts of the same size, the relative *wealth* or *poverty* of the school district produced no discernible differences in superintendents' responses.

Before examing evidence regarding student performance, some of the obstacles to obtaining a full and complete evaluation of flexible staffing should be mentioned. Accurate program evaluation requires appropriate measures of program objectives and an appropriate research design to control other variables which could affect the outcome of the program. These conditions are difficult to achieve with regard to flexible staffing. Appropriate measures do not exist for many program objectives - especially many of those in the affective domain. Good baseline data on student performance are lacking in most school districts.

It takes time to put teaming and differentiated staffing into effect and time for results to show in student performance; most programs are new and in flux and have had little opportunity for such results to show. It is almost impossible to control enough variables to know with certainty whether improvements in student achievement are due to the organizational pattern, rather than some other variables, such as teacher ability and effort. Similarly, it is extremely difficult to determine whether an individual teacher is being utilized in the most effective manner possible for a given group of students.

By far the most important - and distressing - obstacle to evaluation, however, is the fact that few school districts have even tried to evaluate their programs. Of the few which have made systematic assessment efforts, the vast majority were required to do so as a condition of receiving Federal Title III funds of the Elementary and Secondary Education Act. In light of the premises of flexible staffing, the lack of adequate evaluation efforts in most districts must be scored as a serious program deficiency.

Two districts studied by the Commission had completed evaluation studies of their staffing programs. In addition, four other districts had evaluation projects underway or planned. Both of the completed studies reported improvements in student achievement, as follows:

Evaluation data for the Westwood School in Dayton were obtained through a college research project by two candidates for the master's degree in education research. Their study of the Westwood Unit Plan was conducted in the spring of 1970, at the end of the first year of the project. Their report contained this conclusion:

> The findings of this survey. . . indicated that improved instruction and increased pupil performance had been achieved. In addition to improving in academic ratings, the pupils in the continuous progress program developed better attitudes toward school, toward learning, and toward themselves in learning situations.

The report presented academic data from student achievement in the reading instruction program and from standardized tests. Evaluative data were secured from four questionnaires to the teaching staff, and attitudinal data were secured from one questionnaire to parents and questionnaires to two levels (grades) of students. The complete summary of findings from the report is reproduced in Appendix C.

An evaluation of the Multi-Unit School Project at the Martin Luther King, Jr. School in Toledo was conducted during the spring of 1970. This was the second year of the project, funded in part by ESEA Title III Funds. Data were collected bearing upon each of the six major objectives of the multi-unit school project. Objective V was "to assist pupils at Martin Luther King, Jr. School to improve their academic achievement and to develop further their positive attitudes toward school." The summary and conclusions for this objective are presented below, and the full text of the report's summary is reproduced in Appendix D.

Achievement test scores and school attitude inventory results were collected from students of Martin Luther King, Jr. School and the control school. Gates-MacGinitie reading tests results were collected at grades 1 and 2. Iowa Tests of Basic Skills results in reading comprehension, vocabulary, and arithmetic were obtained in grades 4, 5, and 6. School attitude inventory results were collected in grades 1, 2, 3, 4, 5, and 6. A research strategy was established and the data were analyzed to identify any significant differences between the two schools.

The data indicate that the Martin Luther King Jr. School had a greater effect on reading comprehension achievement in grades 4, 5, and 6 and on school attitude in grades 1, 2, and 5. Also the data indicate that the control school had a greater effect on reading comprehension in grade 2 and on school attitude in grade 6.

The results of the achievement tests and the attitude inventories tend to favor Martin Luther King, Jr. School. The differences were statistically significant even though they were not large. The data support the conclusion that the attainment of Objective V was moderately successful.

In the absence of other formal evaluations in the districts studied, the Commission staff asked for informal reports and observations from teachers and administrators. In general, teachers and administrators seemed commendably cautious about claiming improvements in cognitive skills. Where standardized achievement tests had been conducted in reading and math, the educators generally reported that students did as well or slightly better than their previous performance would predict or than did their counterparts in comparable schools. In some districts, the use of individualized curriculum materials in reading and math has made it possible to monitor student performance much more closely, revealing that both slow learners and fast learners have made greater progress

in these subjects than before. Although a few teachers felt that rapid learners benefit the most from the new freedom and opportunities, this was not a majority view.

The most impressive results seem to be in the affective domain. In every district except one, teachers and administrators reported that the most dramatic and hopeful changes occurred in this area. Virtually all of the teachers and administrators interviewed - including some teachers who personally disliked teaming - reported that their students like these programs. They observed that their students are happier, more self-confident, more independent and self-disciplined, and much more interested and involved in their schooling. These observations were volunteered in responses to open-ended questions and were quite widespread and consistent among teachers and administrators in all nine districts. The Commission's spot observations supported these impressions.

The Commission concludes that more research on the effects of different staffing practices is needed, especially on changes in the affective domain, and that better evaluation of programs in specific schools is essential. However, the limited information that is available from systematic evaluations and the overwhelming agreement among professional educators most intimately involved with students in these programs all point to positive results. Perhaps the most telling indicator is that most of the teachers and administrators said that they would not want to go back to conventional teaching.

Financial Cost

Ways can be found to meet the financial costs of flexibly organized schools in most school districts.

The ten districts studied for this report used a variety of approaches to finance flexible staffing. They ranged in wealth from the bottom fifth in the state to the top fifth. Two of them, Xenia and Toledo, received federal funds under provisions of Title III of the Elementary and Secondary Education Act, in amounts of approximately $50,000. These two districts, plus Cleveland, also received some moneys for paid teacher-aides under Title I of the same Act. One district received a cash grant from the local junior league. The other six districts all financed

their flexible staffing programs with no increase in their customary levels of state and local financial support. In these cases, the additional effort needed to plan and implement the programs was either contributed by teachers and administrators or funds were allocated within the regular school budget.

Based on the experience in the districts studied, the Commission finds the following:

(1) Flexible staffing, like traditional patterns of school organization, can be operated at various levels of educational enrichment. Districts can invest few or many of their financial resources in such programs, depending upon the level of educational quality desired.

(2) In most cases there are some additional costs at the beginning. Initial start-up costs, for planning, in-service training of teachers and administrators, instructional materials, evaluation, project coordination and conversion of buildings, can be met in many instances from local resources. Some districts have even begun teaming programs with virtually no additional cash outlay for start-up costs. But by far the most effective programs have made provision for special initial costs either from federal funds or local funds. State funding of the start-up costs of demonstration projects located throughout the State is recommended in the Commission's first report.

(3) Once begun, team teaching and differentiated staffing can be carried on for virtually the same cost as traditional teaching, but probably not for less. Actual operating costs will vary from district to district depending, for example, upon whether paid aides are used, whether federal funds can be used for some of these, the extent to which new curriculum materials are provided, and the mix of teacher salaries under a differentiated salary plan. Again, the cost of the total program will depend upon the level of educational quality desired.

Physical Facilities

Special buildings do not appear to be essential for successful flexible staffing. Flexible school facilities which provide adequate spaces for large-group, small-group, and individual activities probably do make it easier for teachers to achieve more of the potential of flexible staffing. It seemed that the most fully developed and successful programs in the study occurred in the new open-space buildings. (The only serious problem noted: that some open-space designs fail to provide sufficient spaces for individual and private activity.) Such facilities need be no more expensive to build than conventional buildings, and as pointed out in the first report, most new school-building contruction in Ohio is of this type.

The vast majority of existing school facilities in Ohio were designed solely for self-contained classroom teaching, and however outmoded they are, the financial resources of most districts do not permit rapid replacement of traditional buildings. Fortunately, inventive educators are finding effective ways to adapt old buildings to new programs and new programs to old buildings.

At Westwood School in Dayton, teachers were able to achieve a considerable degree of cooperation simply by opening their doors, utilizing corridors for tutoring and small-group projects, and moving groups of children back and forth between rooms.

Teachers at Martin Luther King, Jr. School in Toledo found that their system's budget could manage the rather minimal cost of $3,000 to tear down a non-load-bearing wall between classrooms and to carpet the area. Now many of them would like to tear down more walls, if the structural design of the building would permit it.

In Reading, when an ancient junior high school building became unsafe for further use, the Board found that the net cost for a new building and site would be at least two and one-half million dollars. They decided to keep the shell of the old building but completely redesigned and rebuilt the interior. Now they have a very flexible, efficient and aesthetically appealing open-space middle-school facility, which cost about $750,000. Results have been so satisfactory that the district has made plans to remove some walls in three elementary schools so that space

formerly devoted to corridors can be used for team teaching.

The Commission recommends that school districts strive to provide the most flexible physical facilities possible. But even where facilities cannot be renovated, learning can be improved by following the principle of teaming. School districts should not allow their egg-crate buildings to deter them from developing plans of flexible staffing.

Adaptability of the Teaching Staff

Next to lack of money, the fear most frequently expressed by superintendents was that some teachers would not be able to adapt to flexible staffing. Three concerns were stated: (1) that some teachers would not have the required skills, (2) that teacher organizations might oppose, and (3) that most teachers would not want to leave their self-contained classrooms to take up team teaching. Again, the Commission's findings suggest that the prospects are promising.

The fact that few teachers or administrators possess any training or experience for teaming does not seem to be as serious a hindrance as many fear. The teachers and administrators interviewed found that with practice, experimentation, and conscious effort to change old ways, most who have tried it have been able to learn on the job.

Most of the teachers interviewed seemed mature, self-confident and professional, with rather clear – if not always verbalized – ideas of what they were trying to do in teaching and why. Many volunteered that they felt more self-confident and professional in their new programs. It is impossible to tell to what extent these impressions are due to the method of selecting teachers for the programs (most were volunteers – many invited by their principals) or to the effects of the programs themselves. It is probable that both factors are at work and that these programs encourage and support the personal strengths of both strong and weak teachers.

While it would be desirable to have teachers with prior training in teaming techniques and skills – and it is essential that teacher education institutions move rapidly to provide such training – it does not seem to be an insurmountable obstacle if teachers have not had such training. Given a relatively short period

of in-service training and the challenge and opportunity to work cooperatively in a professional manner to solve problems of individual learners, most teachers seem able to learn from others and on their own to develop the necessary skills and attitudes.

The Commission found several indications that the positions of teacher organizations are not a serious obstacle to flexible staffing. The Ohio Education Association has published helpful information for use in planning better ways of utilizing the teaching staff. In conversations with Commission staff members, representatives of the Ohio Federation of Teachers expressed interest in flexible staffing as one of several steps that could improve the professionalism of teaching. Officials of local teacher organizations interviewed in three innovative districts expressed basic agreement with the principles and objectives of flexible staffing.

The problem of teachers not wanting to leave their self-contained classrooms to take up team teaching appears to be a more serious obstacle. The change from working essentially alone to working in close cooperation with other teachers is a large one for many people to make. Teaming requires them to give up much of their individual independence. They no longer are in sole charge of their classroom routine. The children are no longer "their children." Above all, their ideas and work are exposed to the full view of other teachers and administrators. There is much to threaten the teacher who does not feel as professionally competent or personally secure as other teachers in the team.

The change to teaming may require some teachers to devote more time and effort to teaching than they are accustomed or prepared to commit. Furthermore, some teachers who have invested many years of effort in building up a personal library of materials and plans may be reluctant to share these or give them up and start all over with a team.

Many teachers said that the most difficult change they had to make was learning to work with a team. This was cited as the most serious problem in several schools, although it appears to have been short-lived. Teachers interviewed said that it was usually only a matter of weeks for a team to get to know each other, to get their planning straight, and to begin to function as a unit.

Most schools had some teachers - even among those who volunteered for team teaching - who could not work well with a particular team. This problem was usually solved by changing team assignments. In schools with teams organized according to grade level, team reassignments were more difficult to make; in effect, the organization was less flexible. In these instances, teachers either had to live with the team or transfer to another school. Usually the teacher stayed, and effectiveness of the team suffered as a result.

There was general agreement among people interviewed that some teachers probably cannot, and should not try, to make the change from self-contained classes to team teaching, and that realistic provision should be made for them. To try to force unsuited persons into team teaching simply hinders effective team work and forces unnecessary and unfair strain on students and teachers. If the alternative of transferring to another school is offered to teachers who do not wish to participate in teaming, care should be taken to see that it is a genuine alternative with no stigma attached and that it is perceived that way by teachers.

On the plus side, the great majority of teachers interviewed said that once the team learned to work together, they enjoyed and benefitted from the team experience. Many said that their attitudes toward teaming changed from initial caution to enthusiastic support, after they had tried it. *Most said that although teaming required them to work harder, especially in the first year, they received much more satisfaction from the effort because for the first time they exercised genuine choice in such matters as curriculum and methods and because they could see the results of their efforts in students' enthusiasm and performance. Most said that the adjustment to teaming had been easier and more rewarding than they had expected.*

The Commission recommends that school districts afford opportunities to teachers and administrators to observe flexible staffing in operation in other schools before asking them to consider it for their own schools. The Commission believes that while not all teachers may be able to function at their best in teaming, with a truly flexible staff organization, arrangements can be made to utilize each teacher in his most effective manner.

Community Attitudes

A fifth obstacle to flexible staffing is the fear that some communities would not support it. On the basis of its study, the Commission believes that there are few districts where this is likely to be a serious obstacle. A much more important consideration is whether local educators themselves want flexible staffing.

The Commission staff chose districts of differing size, wealth, social composition, and geographic location for its in-depth interviews. Findings regarding community attitudes were surprisingly uniform in all types of districts: central-city, suburban, small-town, wealthy, poor, and in all parts of the state.

Although flexible staffing fundamentally reorders the instructional program in schools, it does not appear to have become a significantly controversial public issue in any Ohio district. Board members and school officials interviewed knew of no serious opposition in their communities. Part of the reason may be that school administrators in almost all of the districts went to some lengths to inform parents and the community in advance about the plans for flexible staffing, and in no district proposed appreciably higher levels of district expenditure. Teachers and administrators in several districts reported that individual parents who sometimes were skeptical of the idea at first, became enthusiastic when they saw that their children were happy and involved in their school work.

According to educators in the districts studied, the only significant parent dissatisfaction concerned systems of reporting student progress. This is not a serious obstacle and is by no means restricted to schools with flexible staffing. Because traditional marking systems ("A," "B," "C," etc.) tell little about a student's learning progress in relation to his ability, most of the schools studied - and many "traditional" schools, as well have experimented with new reporting systems. Teachers said that parents frequently do not understand the new marks at first and that the greatest anxiety occurs among parents who want the reassurance of knowing that their children are "making 'A's."

Educators reported that some of the strongest parent support for flexible staffing comes from inner-city parents and rural parents who themselves have not had much formal education.

Teachers and administrators in these schools reported that many of these parents feel that something is being done for the first time to meet their children's special needs and that many of their children are enjoying school for the first time. Teachers reported the most dissatisfaction in affluent communities, where some relatively well-educated parents complain at departures from familiar and traditional school practices and evidently become concerned lest changes jeopardize their children's chances of entering college.

The Commission concludes that if administrators will make reasonable efforts to inform parents in advance about flexible staffing and if they will sympathetically consider parents questions and suggestions, the chances of developing strong community support for flexible staffing are good.

There is much public dissatisfaction with schools in general. The Commission submits that the best way to win back public confidence in the public schools is for schools to better meet the needs of students and that effective use of flexible staffing can be one of the best means to do this.

"The Kind of Students We Have"

A number of educators felt that flexible staffing programs might be successful with students in the suburbs but not with inner-city and rural students. Commission findings support the opposite case.

Reports of greatest improvement in academic achievements, in student attitudes, in student discipline and in attendance came from educators in inner-city and rural schools. Teachers in these schools seemed the most enthusiastic about the programs, and inner-city and rural parents appeared the most appreciative of efforts to meet their children's educational needs.

The Commission strongly recommends further research into the impact of flexible staffing on different types of students. However, indications are that flexible staffing can be accomplished successfully with many types of students and communities, and that some of the most impressive results can occur among students who have proven most difficult to reach through traditional methods of school organization.

III KEYS TO SUCCESS

A number of common problems occur in implementing flexible staffing. The particular methods of solution often differ from school to school. The following problems and solutions are outlined not so much to prescribe "authoritative" practices as to illustrate some of the ways in which school districts have shown creativity and initiative in developing their own programs.

In-Service Training

Nearly all teachers and administrators interviewed said that proper in-service training of teachers and administrators is the most crucial fact for successful team teaching organization.

In-service training programs studied varied from district to district, from a maximum length of eight weeks during the summer for key personnel in one district to a minimum of virtually no in-service preparation at all. Out of their experiences with these different programs, teachers and administrators made some remarkably uniform recommendations.

Teachers and administrators felt that the most useful in-service training programs contained three essential elements: (1) presentation of the philosophy and theoretical foundation of teaming and individualizing instruction, (2) presentation of some "how to" information on planning and group dynamics, and (3) opportunity for the acutal teams in a school to begin making their own plans for the school year.

Although it is difficult ever to get "enough" in-service training, this does not mean that everything should be covered beforehand. Some aspects of training may not be very meaningful until the participants have had some actual experience with a program. Most teachers and administrators agreed that the optimum period for in-service training would be about two weeks immediately before the beginning of the autumn school term. Teachers who had received this type of in-service training seemed well satisfied with it.

Many teachers advocated making selections of staff for

teaming far enough in advance for the selectees to visit some actual flexible staffing schools and classrooms before the end of the school year. Many of the teachers interviewed had never actually seen a team-teaching program until they began planning one of their own. Those who had had opportunity to travel and compare programs said that it was the single most useful in-service experience for them.

Additional sessions of in-service training during the year – especially during the first year of a program – will probably be needed. After working together for a time, teams sometimes discover that they need particular expertise that they do not have – knowledge of individualized curricula, or skills in group interaction, for example. Often the needs of one team will be different from the needs of another.

In one school, the teams themselves decide how to spend the school's limited budget for in-service training during the year. Teams are also allowed to hire their own consultant, if necessary. Everyone in the school seemed well pleased with the effectiveness of this arrangement.

Policies of remunerating teachers for in-service time also varied between districts. In most cases, the policy seemed dictated almost entirely by the state of the district's existing budget. In some districts, teachers were persuaded to come back to school a few days early in the fall for no pay at all, because no money was available. In other districts, the budget permitted teachers to receive up to $25 per day for in-service time, mainly through the receipt of Federal Title III funds.

The Commission recognizes that many teachers bring a great deal of enthusiasm and dedication to their work and may be willing to put extra time into in-service training with little or no financial reward in order to bring about genuine improvement in the school program. It does not advocate this as an acceptable general practice, however, and believes that a more just and effective policy is to make in-service training for flexible staffing a regular condition of employment and to remunerate teachers at a rate of pay as close to their regular daily rate as possible.

Time for Planning

It was apparent that adequate time for team planning is a genuine need in all of the schools visited and one frequently overlooked in first thoughts about teaming.

Teachers in several schools said that they had to put in more hours than before, both at school and at home, to complete their plans and preparations. Several teams told of getting together informally from time to time at each other's homes on weekends to make plans that they do not have time for during the school day. Teams were observed in several schools voluntarily meeting during their lunch time to plan, although their principals could not require them to do so.

Several solutions to the problem of garnering time for planning have been proposed. The most common practice in elementary schools is to schedule special subject teachers - in art, music, and physical education, for example - to a block of time with the students each week, thus freeing the regular teaching team to plan. This does ease the problem, but makes it difficult for regular staff teachers to know what specialized instruction the children are receiving and makes it almost impossible to integrate the specialized instruction into the life of the team. Also, many schools simply do not have the services of instructional specialists.

It is sometimes possible to gain planning time for staff teachers by having assistant teachers or paid aides supervise student work for an hour or so. Some teams have found it easiest to devote an hour before or after school each day to planning.

These are solutions that can be implemented in the short-run by school districts themselves. Other solutions might be worked out in the longer run. As differentiated teaching roles become more clearly developed and defined, it may become possible to build provision for planning time during the working day into job descriptions and negotiated contracts for different categories of teaching personnel.

Another longer-term solution might be to provide released time for team planning. Students could be sent home early on specified days and the school year extended accordingly.

A similar result could be accomplished without any addition-

al expenditure by providing released time without extending the school year. This would require adjustments in state minimum standards, and the Commission commends it to the attention of the State Department of Education for study.

Curriculum Materials

In many schools, teaching teams have difficulty obtaining appropriate curriculum materials for individualized and small-group instruction. Getting appropriate materials into the right hands requires three things.

First, administrative procedures in the district must allow local teaching teams and principals to choose the curriculum materials they need. For example, centralized purchasing of a single text for an entire grade makes it impossible to individualize curriculum materials and turns team "decision-making" into a waste of valuable time.

Second, teaching teams must be sufficiently knowledgeable about available curricula to make wise choices. This knowledge can be acquired through individual research, from central office supervisors and coordinators with necessary expertise, and through in-service training.

Third, there must be a supply of appropriate materials from which to choose. When supplying new schools, it is usually a relatively simple matter to order a few copies of a variety of curriculum materials, instead of many copies of a single text. For older schools, and in poorer districts, the problem is more serious. Often the materials a school does have somehow get squirrelled away in individual classrooms. Requiring teachers to pool them produces a much more efficient use of scarce resources and also introduces teachers to the idea of sharing.

Sometimes book storerooms and warehouses can be raided for unused and outdated textbooks to supplement reading and other instruction. Although these practices may result in more efficient use of available resources, they are makeshift at best. To convert a conventional school completely to flexible staffing requires an adequate supply of up-to-date learning materials. In some cases this may call for substantial adjustments in annual book budgets.

Scheduling

Teaming requires a great deal of cooperation and coordination of activities among many people. To some extent the "schedule," or the plan to coordiante activities, is a restriction on the freedom which self-contained teaching allows. Teachers accustomed to keeping their own time and varying the class activities on the spur of the moment find that they now have to stick to a plan in order to coordinate their efforts with those of other teachers. Scheduling, therefore, becomes a very important activity in a flexible staffing program.

Rigidly centralized scheduling can be disastrous to effective teaming, and hastily considered schedule changes can greatly frustrate team teachers. For example, a school-wide or district-wide policy of devoting a particular bloc of time to instruction in a particular subject takes away from a teaching team much of the discretion to tailor the instructional program to the particular needs of their students. One teacher who was interviewed complained that school policy did not allow her to take her young first-graders outside for a morning recess, even to relieve a long morning of unaccustomed concentration on achievement testing. Such rigidity in scheduling, however well intentioned, seems self-defeating.

Unanticipated schedule changes are sometimes unavoidable, but every effort should be made to prevent unnecessary changes or changes on short notice. Administrators would do well to involve teaching teams as much as possible in schedule-making, to try to channel central policy changes through the teaching teams for implementation, and to try to arrange such necessities as busing, lunch, and specialized instruction to allow the teaching team as much freedom in scheduling as possible.

Flexible People and Flexible Organization

The school staffs which seemed to have the greatest success in adopting new plans of organization for learning were ones in which school people had taken a careful and realistic look at their programs and resources, had been able to identify and define a set of "education needs," and then had created a workable

program for applying their resources toward meeting their needs. No two districts studied did this in the same way. Some started with quite explicit statements of philosophy and goals. Others operated more implicitly and gradually evolved common agreement and understandings.

The goals were not the same in all districts. In one district the basic program goal was to "develop the affective domain" in individual learners; in another, "to give every child a successful experience in school;" in others, it was simply to individualize instruction as much as possible. In each case the goals, whether comprehensive or limited, whether stated explicity or implicitly, were only very general frameworks at best. They left much room for initiative by school staffs to fill in the details of programs.

It appeared that teachers tend to look for the types of child behavior suggested by the objectives of their school's particular program. Where program objectives emphasized development of the affective domain, teachers noticed changes in these areas - many mentioning that they were doing so for the first time. Where programs emphasized development of cognitive skills only, teachers rarely mentioned affective behavior. This points up the need to frame program objectives carefully and the need for more adequate in-service training to sensitize and sharpen teachers' skills in observing all facets of child behavior.

Flexible staffing arrangements actually can foster constructive changes in the objectives toward which teaching staffs work. Instructional objectives and the attitudes of teachers seem to become both more child-centered and more concerned with development of the whole child in flexibly staffed schools than in the majority of schools with traditional, self-contained classrooms. In light of the lack of change which most authorities agree has been the dominant tradition in self-contained teaching, this finding has particular significance. It does not seem a serious defect that different school systems and different teaching staffs may arrive at slightly different educational goals and philosophies. What is significant is the change of goals, the increased purposefulness, and the greatly increased self-awareness of teaching staffs about the relationship between their instructional goals and their actual instructional performance.

There were too few districts in the study to make many

generalizations about the characteristics of superintendents who implement flexible staffing. As would be expected, all of them seem professionally motivated and interested in innovation. In most of the districts the superintendents themselves initiated flexible staffing, usually within their first five years in the district. In two districts the superintendents were apparently won over to the idea by other members of their staffs.

The superintendents of districts with programs that appeared to be most successful seemed to be open to new suggestions, willing to listen to subordinates and the community, and willing to delegate a considerable degree of decision-making authority to principals and school staffs. These things are not enough in themselves to make a successful program come about. Undoubtedly, the superintendents were also capable of taking decisive action to get programs started and to take steps to correct problems as they arose. Above all, they seemed genuinely dedicated to encouraging their subordinates to innovate and make these programs successful.

Less successful programs involved instances in which school superintendents were unwilling or unable to remove administrators whom they thought were not fully capable of doing their jobs in flexible staffing, and instances where delegation of authority was professed but not carried out.

Flexible staffing does require one important change in central office organization. The central office - and this means the entire central staff of the district - must carry out its responsibilities in such a way as to permit local school staffs meaningful discretion over matters of curriculum and methods. It is possible for a member of a superintendent's staff who does not understand or wish to cooperate with the flexible staffing project to nullify substantial planning efforts at the building level and jeopardize an entire project.

One of the biggest changes which occurs in flexible staffing is in the role of the principal. This fact is all the more important because, in many cases, it has not been anticipated by either the administrative staff or the principals themselves. *It is probable that the principal plays the single most crucial role in the success or failure of any flexible staffing plan.*

In flexible staffing, the principal becomes the chief facilitator

of the instructional program of the school. As stated in the Commission's first report, many principals are freeing themselves from exclusive concern with the non-instructional aspects of administration and maintenance so that they can take a larger hand in instructional leadership. Flexible staffing does allow principals to play this role, but it also calls for skills and attitudes that are seldom developed through conventional administrative training and experience. Indeed, much conventional administrative practice and lore would seem to encourage just the opposite. Although the necessary professional *knowledge* apparently can be acquired rather easily, it appears to be much more difficult for an experienced administrator to develop the appropriate *attitudes* and *personal skills* if he does not already have them.

In order to exercise instructional leadership, principals themselves must be relatively well-informed about curriculum and teaching methods, although they obviously cannot be expert in all areas. Some principals in the study were criticized for not being knowledgeable enough about curriculum to provide the help that teachers desired and needed. Sometimes the principals tended to feel threatened in joint planning sessions, to the detriment of good team-work and staff commitment.

Because principals play a key role in determining how personnel will be assigned in the school organization, it is important for them to be skilled, sensitive, and fair in evaluating teaching performance and ideas. Simply elevating the most senior teachers to new positions of authority in the teams will not make teaming work. Taking this "easy way out" will not produce good team leadership if the senior teachers lack the requisite skills. The single problem mentioned most frequently by teachers was personality conflicts within teams; principals must be highly perceptive and sensitive to people in order to prevent such problems and to recognize and alleviate them when they do occur.

Because teaching teams should have substantial responsibility for the administration of their own team, it is important for principals as well as superintendents to be able to delegate and share authority. A majority of principals interviewed indicated that learning to delegate and share authority was the most difficult change they had to make. In some cases, individualization of instruction and morale of the teaching staff have clearly suffered

because administrators could not delegate sufficient authority for the teaching teams to function effectively.

It is understandable that some principals might be reluctant to share their authority. In flexible staffing, as in conventional staffing, principals have primary responsibility for such support functions as building maintenance and mangement, community relations, and communications with the central office, and ultimately for the instructional program itself. Consequently, many principals feel the need to try to "control" personally as many aspects of "their" schools as possible. Unfortunately, this approach not only tends to overwork principals and works against the objectives of flexible staffing by discouraging teacher initiative and responsibility, but principals who monopolize administration also rob their schools of the benefits of combined judgment.

Teaming seems to require administrators with a great deal of confidence in themselves and in their subordinates. For effective team decision-making to take place, principals must combine confidence with the ability to admit mistakes and to do so without feeling personally threatened and closing up the decision-making process.

It is important to realize that although flexible staffing does alter the roles of principals, and that administrators who cannot fulfill the necessary roles can subvert the objectives of the program, almost all of the principals interviewed, even those who felt unsure of themselves, expressed great satisfaction from their participation in flexible staffing. Almost all felt that they were doing a better job than before, including their relations with the community and the central office, and that this was the best way to organize a school.

Flexible staffing obviously also alters the roles of teachers in dramatic ways. *Probably the most significant change is that it requires the teacher's primary orientation to be toward the child rather than toward the subject matter.* Teachers in almost every district studied volunteered comments to the effect that for the first time in their teaching careers they were really looking at children as individuals.

Teachers also indicated that the most difficult adjustment they had to make was to move out of self-contained isolation and into the exposed contact of teaching teams. Teaming requires a great

deal of self-discipline in order to avoid personality conflicts on teaching teams, and to stick to plans and schedules drawn up by the team.

It is difficult to determine which personal characteristics are associated with success and failure in teaming. Age does not seem to be one of them. The study encountered both old and young teachers and administrators who were successfully adapting to team teaching, and young and old who were failures. Nor do sex or length of experience appear significantly related to teaming success. Some educators who were enthusiastic about the idea at first encountered failure in teaming, and some who were skeptical at first came to enjoy the programs. Personal ego strength, self-confidence, and self-discipline - all characteristics which contribute to skills in interpersonal relations - do seem to be important factors related to success as a teacher or administrator in flexible staffing.

IV IMPLEMENTATION STRATEGIES

There is no master formula for getting flexible staffing started. Fortunately, none appears to be needed. The ten districts studied displayed ten different approaches to leadership in program innovation.

Staff enthusiasm seemed markedly higher in those programs which were planned and developed with substantial involvement of the teaching staff than in those palnned and "imposed from above" by administrators. This feeling appeared in the *intensity* of teachers' comments as well as their frequency. There are at least two important reasons for involving the teaching and administrative staffs early and directly in designing a flexible staffing program. The first is to help assure that the program will suit the district's particular needs and resources. The second is to promote professional growth, understanding of the program, and commitment to the program by those responsible for its operation. Part of the success of flexible staffing is due to its ability to generate and apply constructive self-criticism from teaching staffs, and the place to begin developing this ability is at the beginning.

We also believe that the scope of the program is an important consideration in getting flexible staffing started. Nearly everyone contacted for the study said that it is best to implement flexible staffing *gradually*. Their practices, however, differed greatly. *How gradual* should the implementation be? There is much to suggest that *the most gradual is not the most desirable.*

The Commission believes that there is danger in trying only a little teaming: it may result in merely "going through the motions," changing little in the classroom and simply adding further fruitless, annoying burden to teachers. If begun, there should be enough team activity to be rewarding and productive – to actually change classroom patterns.

School staffs also have some discretion in deciding which aspects of flexible staffing to emphasize first. Several programs

studied emphasized only learning to individualize instruction in one subject the first year, with teaching teams functioning for that subject only. One district took the opposite approach and emphasized learning to operate teams, without strong emphasis on individualizing instruction. One district combined these approaches and sought to have the teaching staff learn to do teaming and to individualize instruction in a non-graded program at the same time.

The schools which concentrated on individualizing one subject at a time appeared successful in reaching this objective. This experience did not seem to carry over into other subject areas, however. The school which concentrated in the beginning on teaming, appeared to achieve smoothly functioning teams and some individualization through frequent regrouping of students, but not a fully individualized program. The schools which introduced team teaching and individualized nongraded instruction at the same time found that they could achieve both objectives. This plan seemed to shorten by a considerable amount the time required to develop a full-fledged, flexibly staffed school. Significantly, staff morale and enthusiasm seemed higher in these schools, and teachers appeared more professional and less willing to rest upon their laurels than in any of the other schools studied.

Evidently, programs which emphasize only teaming or only individualized instruction can be successful in reaching these objectives, but in limiting their objectives in this way, schools may forego opportunities to achieve other desirable innovations at the same time.

The Commission believes that teaming and an individualized curriculum possibly are innovations which go hand in hand. These innovations - the one substantive and the other procedural - may be complementary, and it may not be substantially more difficult for a teaching staff to adopt both innovations at the same time than to adopt first one and then the other. Our sample of schools was too small and our methods were too unsystematic to test this idea adequately, but it is an area which in our judgment deserves further study from educational researchers and practitioners.

Just as it can be a mistake to try too little teaming, we also

believe that it can be a very costly mistake to try too much. School districts should probably try to begin flexible staffing in only one or two buildings at a time. Learning to do flexible staffing takes time, for *principals* and *central office staff* as well as the teaching staff. Mistakes at the district level can be very costly - in resources and in staff commitment. The consequences can be reduced and the opportunities to draw upon experienced leadership can be improved, if the program is phased into only a few schools each year.

Another strategic consideration concerns *the type of curriculum to use in flexible staffing.* Is it better to use "canned" curricula and systems of individualized instruction, or to develop one's own curriculum materials within the school and district?

Published systems of individualized instruction are often developed by learning experts and tested extensively to insure that they are effective. On the other hand, teachers may be more committed to programs which they have developed themselves and that they can tailor to their own needs and requirements.

The question as posed may rarely be encountered in practice because probably no teaching team or school staff could develop all of its own materials or would consider it desireable to do so. In practice, most schools use a combination of materials.

What teaching teams can do is establish their own priorities on skills and behavioral objectives. This can provide a well considered basis for selecting among curriculum materials and techniques for achieving these objectives. It seems vital, for the commitment of teachers and the quality of the instructional program, that teaching teams possess and exercise this kind of responsibility for planning the instructional program.

The list of educational "innovations" which have faltered after the first blush of enthusiasm wore off is lengthy. Will flexible staffing meet the same fate? Although as yet all of the programs are still quite new, there is good reason to believe that none should.

The practices which we term "flexible staffing" are not ends in themselves, but a means to an end. They improve the chances that better learning will occur for more children. Their success is measured by what happens in the classroom - changes in the

behavior of both students and teachers which improve learning.

Flexible staffing provides no air-tight guarantee that these improvements will occur. Organizing teachers into teams will not make every teacher an excellent teacher or make every classroom superior. There are impressive classes conducted by individual teachers in self-contained classrooms and some staffs nominally organized into "teams," which do little different from the conventional pattern. However, teaming by its nature encourages teachers and administrators to examine their objectives, their techniques, and their results. It encourages them to face up to the problem of children failing to learn because it acts to reduce the sense of failure a teacher may feel when he or she has the sole responsibility for the progress of that child. It provides incentive and assistance for teachers and administrators to cooperate and make their best efforts.

Probably no system can absolutely guarantee teaching excellence, but in the Commission's judgment flexible staffing is more likely to produce high standards of professional conduct than any conventional method because of the self-corrective dynamics inherent in the teaming process.

A final word of encouragement to administrators, teachers, board members, and citizens: None of the administrators or teachers interviewed for our study had ever had experience with the type of instructional program which they were conducting. All were plowing new ground. All were developing new programs as they went along. This kind of staff contribution is the most important element of successful flexible staffing. Probably the most important condition that can be provided is the opportunity for staff to try. Undoubtedly the most important step is to begin!

APPENDIX

Appendix A: The Ohio School Superintendents Survey #1
March, 1971

1. A number of changes from the traditional patterns of staffing public schools are being tried in some school districts, such as differentiated staffing, team teaching, and use of teacher aides.

   What have you found to be the most useful source(s) of information about these staffing programs and practices? PLEASE CHECK THE APPROPRIATE SPACE(S).

76.07%	Professional literature
21.80%	State Department of Education
11.85%	University courses
76.07%	Conventions, conferences, workshops
40.05%	Professional colleagues outside your district
29.62%	Your own staff
5.21%	Other (please specify): _____

   _____

2. In your district, do you feel that it is important to move away from the self-contained, single-teacher classroom pattern of school organization?

   70.38% Yes **26.30%** No **3.32%** No answer

   If YES, how strongly do you feel that the following flexible staffing patterns are/would be desirable in your district?

   PLEASE DRAW A SLASH THROUGH THE NUMBER THAT CORRESPONDS TO YOUR FEELING ABOUT EACH PATTERN.

	Very Desirable	Desirable	Neutral	Un-desirable	Very Un-desirable	Don't Know
Team teaching	26.30%	41.94%	11.85%	1.42%		.47%
Paid aides	32.23%	36.02%	10.19%	2.61%	.24%	1.42%
Differentiated staffing	20.85%	31.28%	21.80%	.95%	1.18%	4.50%
Variable scheduling	22.04%	39.10%	16.82%	.71%		1.90%
Extended use of teacher time	22.75%	37.91%	13.03%	1.90%	.24%	3.55%
Other (please specify):	4.50%	1.18%				.24%

_____

_____

_____

3. **Which of the following patterns of school organization are in effect currently within your district?**

51.18% Team teaching

65.88% Paid aides

10.43% Differentiated staffing

31.52% Variable scheduling

32.94% Extended use of teacher time

6.87% Other (please specify below):

14.76% None _____

_____

IF YOU CHECKED NO ITEMS IN QUESTION 3, PLEASE SKIP TO QUESTION 8.

4. What resources did you draw upon in developing and implementing these programs?

23.70%	Universities
23.46%	State Department of Education
49.53%	People in other districts
81.04%	No outside help
18.72%	Other (please specify): _____

5. Do you have evidence to indicate that these programs have successfully met your original expectations?

74.86% Yes **15.36%** No **9.8%** No answer

If YES, what is the nature of this evidence?

63.43%	Improved student achievement
22.76%	Improved student attendance
92.16%	Better teacher satisfaction
55.60%	Better parent satisfaction
11.19%	Other (please specify): _____

_____

6. In general, do you feel that these programs in your district have been -

4.19%	Successful in all important respects?
73.46%	Successful in most important respects?
13.69%	Successful in only a few respects?
.28%	Unsuccessful?
2.23%	No opinion/Don't know
1.68%	Other (please specify): _____
4.47%	No Answer _____

7. What are the most important limitations that have kept the programs from being more successful? _____

_____

_____

8. How likely would your district be to implement any of these staffing patterns if the following programs could provide aid to your district?

PLEASE DRAW A SLASH THROUGH THE NUMBER THAT CORRESPONDS TO YOUR FEELING ABOUT EACH PROGRAM.

	Very Likely	Somewhat Likely	Neutral	Somewhat Unlikely	Very Unlikely	Don't Know
State grants for start-up costs including in-service training costs	53.08%	25.59%	6.40%	3.32%	3.79%	.95%
State technical assistance in planning, implementation, and evaluation of staffing procedures	31.52%	33.41%	14.45%	3.79%	4.50%	1.90%
Changes in the State Foundation formula which will permit more latitude in staffing arrangements (please describe briefly): _____ _____	60.19%	18.72%	6.16%	.71%	2.61%	3.08%
Other (please describe briefly): _____ _____ _____	3.79%	1.18%			.24%	.71%

Total Questionnaires Mailed: 631

Total Usable Questionnaires Returned: 422

Percentage of Usable Questionnaires Returned: 67.0

Appendix B: Where to Get More Information

School Visits

The most vivid way to get the feel of flexible staffing is to observe it in action. Most flexible staffing schools welcome visits from interested educators and laymen. Fortunately, flexible staffing makes it relatively easy to visit classes without disrupting classroom activity.

The number of flexible staffing schools in Ohio is growing each year. A selective listing of some of these schools was included in an appendix to the Commission's first report, "Organizing for Learning." Others may be found through inquiries with local school officials.

Publications

There is a growing literature on differentiated staffing and team teaching. Much of it is polemical, but reports of actual experience with flexible staffing are becoming more numerous. The following items are either seminal or concerned with some of the very practical problems of flexible staffing:

Allen, Dwight W.,
"A Differentiated Staff: Putting Teaching Talent To Work,"
National Education Association,
December, 1967, 12 pp.

Allen, Dwight W.,
"A Differentiated Teaching Staff,"
New York State Education,
December, 1969, pp. 16-19.

Allen, Dwight W., and L. W. Kline,
"Differentiated Teaching Staff,"
National Business Education Quarterly,
May, 1969, pp. 25-29.

Allen, Dwight W.,
"The Education Professions Development Act and Staff Differentiation,"
Teacher Education Issues and Innovations (A.A.C.T.E. 21st Yearbook),
1968, pp. 83-89.

American Federation of Teachers,
"The Teacher: Programmed?. . .Or Participant?"
American Teacher (American Federation of Teachers),
September, 1969, pp. 3 & 5

Arnold, Joseph P.,
"Applying Differentiated Staffing to Vocational-Technical Education,"
Journal of Industrial Teacher Education,
Fall, 1969, pp. 13-20.

Association of Classroom Teachers,
"A.C.T. Viewpoints,"
Today's Education (National Education Association),
March, 1969, pp. 60 & 61.

Association of Classroom Teachers,
"Classroom Teachers Speak on Differentiated Teaching Assignments,"
National Education Association,
1969, 32 pp., ED 030 593.

Association of Classroom Teachers,
"The Classroom Teacher Speaks on his Supportive Staff,"
National Education Association,
1967, 37 pp., ED 029 805.

Barbee, Don,
"Differentiated Staffing: Expectations and Pitfalls,"
National Education Association (N.C.T.E.P.S.),
March, 1969, 7 pp.

Beaubier, Edward M., and Donald Hair,
"Experiences with Differentiated Staffing,"
Today's Education (National Education Association),
March, 1969, pp. 56-58.

Boyd, Richard A.,
"The Executive Teacher,"
Administrative Staff Bulletin, Warren City Schools (Ohio),
March, 1970, pp. 46-55.

Brown, B. Frank,
"The Nongraded High School,"
Englewood Cliffs, N. J. 1963

Center for Differentiated Staffing,
"How To Build a Model of Staff Differentiation,"
Claremont Graduate School, August 1970

Connors, Joy,
"Building A Career Ladder,"
American Education,
February, 1969, pp. 15-17.

Corder, Lynn, Vernon Bowman, and Robert Hemberger,
"A Plan for Staff Development and Instructional Program Design,"
Mentor Public Schools (Ohio),
March, 1969

Cormin, Ronald G.,
"Enhancing Teaching as a Career,"
Today's Education (National Education Association),
March, 1969, p. 55.

Denemark, George W.,
"Coordinating the Team,"
The Supervisor: New Demands Plus New Dimensions,
December, 1967, pp. 61-70.

Earl, S. A.,
"Differentiated Staffing,"
Western Canada Administrators' Conference Paper,
October 10, 1969, 29 pp., ED 036 885

Edelfelt, Roy A.,
"A Possible Dream: A New Education and New Models of Teachers,"
The Teacher and His Staff: Differentiating Teaching Roles, N.C.T.E.P.S., N.E.A.,
1969, pp. 109-120, ED 030 615, ED 030 595

Edelfelt, Roy A.,
"Comments on Differentiated Staffing,"
Today's Education (National Education Association),
March, 1969, p. 58.

Edelfelt, Roy A.,
"Implication of Differential Utilization of Personnel for Preparation Programs,"
Teacher Education Issues and Innovations (A.A.C.T.E. 21st Yearbook),
1968, pp. 79-83.

Edelfelt, Roy A.,
"Redesigning the Education Profession,"
National Education Association (N.C.T.E.P.S.),
January, 1969, 17 pp.

Edelfelt, Roy A.,
"Remaking the Education Profession,"
N.E.A. Reporter (National Education Association),
November, 1968, p. 2.

Edelfelt, Roy A.,
"The Teacher and His Staff,"
N.J.E.A. Review (New Jersey Education Association),
February, 1967, pp. 15, 32-34.

Education, U. S. A.,
"Differentiated Staffing in Schools,"
National School Public Relations Association,
1970, 48 pp.

English, Fenwick,
"Differentiated Staffing: Giving Teaching a Chance to Improve Learning,"
Florida State Department of Education,
September, 1968, 17 pp.

English, Fenwick,
"Et Tu, Education, Differentiated Staffing?",
National Education Association (N.C.T.E.P.S.),
August, 1969, ED 033 896.

English, Fenwick,
"Questions and Answers on Differentiated Staffing,"
Today's Education (National Education Association),
March, 1969, pp. 53 & 54.

English, Fenwick,
"Teacher May I? Take Three Giant Steps! The Differentiated Staff,"
Phi Delta Kappan,
December, 1969, pp. 211-214.

English, Fenwick, and Joseph M. Conte,
"Impact of Technology on Staff Differentiation,"
Audiovisual Instruction,
May, 1969, p. 108.

English, Fenwick, and John M. Rand,
"Questions and Answers Concerning Innovation and the Temple City Schools,"
Temple City Unified School District (California),
August, 1968, 4 pp.

English, Fenwick, and John M. Rand,
"Towards a Differentiated Teaching Staff,"
Phi Delta Kappan,
January, 1968, pp. 264-268.

Fisher, James L.,
"The New Teacher Education: Prospects for Change,"
The Teacher and His Staff: Differentiating Teaching Roles,
(N.C.T.E.P.S., NEA.),
1969, pp. 59-71, ED 030 595

Florida State Department of Education, Division of Curriculum and Instruction,
"Flexible Staff Organization Feasibility Study,"
Florida State Department of Education,
February, 1969, 40 pp. ED 033 086.

Frinks, Marshall L.,
"A Readiness for Differentiated Staffing: Related Research Topics,"
Florida Department of Education,
September, 1969, 4 pp.

Goodlad, John I., and Robert H. Anderson,
"The Nongraded Elementary School,"
New York: Harcourt, Brace and World, Inc., 1959.

Gottlieb, E. F.,
"Staff Innovation Serves a Unique High School,"
Oregon Education (Oregon Education Association),
December, 1969, pp. 2 & 3, 28 & 29.

Hair, Donald and Eugene Wolkey,
"Differentiated Staffing and Salary Plan Underway in Kansas City,"
School and Community (Missouri State Teachers Association),
April, 1969, pp. 8-14.

Hair, Donald,
"Experiences with Differentiated Staffing,"
Today's Education (National Education Association),
March, 1969, pp. 57 & 58.

Harvey, J. I.,
"On Differentiated Staffing,"
American Teacher,
November, 1969, p. 19.

Haskew, Laurence D.,
"Peopling Education,"
The Teacher and His Staff: Differentiating Teaching Roles,
N.C.T.E.P.S., NEA.,
1969, pp. 29-38, ED 030 595.

Hemberger, Robert,
"Differentiated Lake Elementary Staffing Plan,"
Mentor Public Schools (Ohio),
No date given, 13 pp.

Horvat, John J.,
"Major Impediments to Educational Change and Improvement,"
The Teacher and His Staff: Differentiating Teaching Roles,
N.C.T.E.P.S., N.E.A.,
1969, pp. 95-108, ED 030 595.

Howard, Eugene R.,
"Staff Support for Innovative Teaching,"
The Teacher and His Staff: Differentiating Teaching Roles,
N.C.T.E.P.S., N.E.A.,
1969, pp. 47-58, ED 030 595.

Jordan, Daniel C.,
"New Perspectives on Relevance in Education,"
The Teacher and His Staff: Differentiating Teaching Roles,
N.C.T.E.P.S., N.E.A.,
1969, pp. 16-28, ED 030 595.

Klucher, James and Robert Gilson,
"Program for Orchard Hollow Elementary School,"
Mentor Public Schools (Ohio),
August, 1970, 11 pp.

Krumbein, Gerald,
"How to Tell Exactly What Differentiated Staffing Will Cost Your District,"
American School Board Journal,
May, 1970, pp. 19-24.

Lierheimer, Alvin P.,
"Cast Off the Bowline,"
Today's Education (National Education Association),
March, 1969, p. 62.

Marin Staff Differentiation Project,
"Staff Differentiation - An Annotated Bibliography,"
Marin County (California),
Superintendent of Schools Office, July 1970.

MacDonald, John,
"Teacher Education: Analysis and Recommendations,"
The Teacher and His Staff: Differentiating Teaching Roles,
N.C.T.E.P.S., N.E.A.,
1969, pp. 1-15, ED 030 595.

McKenna, Bernard H.,
"School Staffing Patterns,"
California Teachers Association,
1967, 27 pp., ED 033 898.

Miller, Starr,
"Differentiated Staffing,"
Georgia Education Journal (Georgia Education Association),
April, 1969, pp. 8 & 9.

National Education Association,
"A Position Statement on the Concept of Differentiated Staffing,"
National Education Association (N.C.T.E.P.S.),
May 11, 1969, 8 pp., ED 033 882.

National Education Association,
"Remaking the World of the Career Teacher,"
National Education Association (N.C.T.E.P.S.),
1966, pp. 177-183.

Nickerson, James F. and Others,
"Staff Differentiation and the Preparation of Educational Personnel,"
Teacher Education Issues and Innovations (A.A.C.T.E. 21st Yearbook),
1968, pp. 78-104.

Olivero, James L.,
"The Meaning and Application of Differentiated Staffing in Teaching,"
Phi Delta Kappan,
September, 1970, pp. 36-40.

Olson, Charles E.,
"The Way it Looks to a Classroom Teacher,"
Today's Education (National Education Association),
March, 1969, p. 59.

Pearl, Arthur,
"The New Careers Concept and Staff Differentiation: Some Issues,"
Teacher Education Issues and Innovations (A.A.C.T.E. 21st Yearbook),
1968, pp. 89-96.

Rand, M. John,
"Case for Differentiated Staffing,"
California Teachers Association Journal (California Teachers Association),
March, 1969, pp. 29-33.

Roush, Donald C.,
"Educating Teachers Through Differentiated Roles,"
The Teacher and His Staff: Differentiating Teaching Roles,
N.C.T.E.P.S., N.E.A.,
1969, pp. 86-94, ED 030 595.

Ryan, Kevin A.,
"Where Are We Going and How Can We Get There?",
The Teacher and His Staff: Differentiating Teaching Roles,
N.C.T.E.P.S., N.E.A.,
1969, pp. 72-85, ED 030 595.

Shapes, Donald K.,
"Differentiated Teaching Personnel: A Model for the Secondary School,"
Arizona State University (Unpublished Doctoral Dissertation),
June, 1969, 144 pp., ED 035 614.

Shaplin, Judson T., and Henry F. Olds, Jr., (eds.),
"Team Teaching,"
New York: Harper and Row Publishers, 1964.

Smith, E. Brooks,
"Tooling Up for the E.D.P.A.: A Case Study,"
Teacher Education Issues and Innovations (A.A.C.T.E. 21st Yearbook),
1968, pp. 96-98.

Stevens, Jody L.,
"Of Immediate Concern: Better Teacher Utilization,"
April, 1969.

Stocker, Joseph, and Staff,
"Education USA Special Report: Differentiated Staffing in Schools,"
Washington, D.C.: National School Public Relations Association,
1970.

Stover, Michael,
"The Temple City Story: New Careers in Teaching; Differentiated Staffing,"
1969, 12 pp., ED 029 853.

Tobias, Arlene,
"Educators Consider Differentiated Staffing,"
Wisconsin Journal of Education (Wisconsin Education Association),
November, 1969, pp. 11 & 12.

Trump, J. Lloyd,
"Images of the Future II,"
The Teacher and His Staff: Differentiating Teaching Roles, N.C.T.E.P.S., N.E.A.,
1969, pp. 39-46, Ed 030 595.

Trump, J. Lloyd,
"Needed Changes for Further Improvement of Secondary Education in the U.S.,"
National Association of Secondary School Principals.

Trump, J. Lloyd,
"New Dimensions to Quality Education in the Secondary School Tomorrows,"
National Association of Secondary School Principals.

Twist, Dwight E.,
"Improving Instruction Through More Effective Utilization of Certified Personnel,"
Journal of Secondary Education,
January, 1968.

Weissman, Rozanne,
"The Differentiated Teaching Staff,"
Indiana Teacher (Indiana State Teachers Association),
Spring, 1969, pp. 140 & 141.

Weissman, Rozanne,
"Staff Differentiation,"
Kansas Teacher (Kansas State Teachers Association),
October, 1969, pp. 26-29.

Weissman, Rozanne,
"Staff Differentiation: An Answer to the Merit Pay Debate,"
Ohio Schools (Ohio Education Association),
February 14, 1969, pp. 11-14, 22 & 23.

Wisconsin Education Association,
"Differentiated Staffing: How? Why?",
Wisconsin Journal of Education (Wisconsin Education
Association),
September, 1969, p. 12.

Appendix C: Summary of Evaluation Findings, Westwood School, Dayton

Academic Data

The pupil performance was presented in two ways:

Grade placement of reading instructional level. - Of the 1969-70 Level One class 87% effectively handled first level reading material while 18% of the 87% handled part of second grade material and 6% handled all of second year material. By contrast, 6% of the 1968-69 Grade One pupils effectively read first year material and only ½% read either part or all of second year material.

Standardized test data. - Pupils taught through the *Ginn Basal Program* and the *McGraw-Hill Programmed* approach scored significantly higher (.01) than did the pupils taught through the *Merrill Linguistic* or the *Chandler Language Experience* approach.

Evaluative Data

Staff evaluation was achieved through the use of four questionnaires:

Total Differentiated Staff Questionnaire. - Realization of program objectives and increased pupil performance, except for the question of adequate time, were rated as good (3) to excellent (1). Questions of interstaff planning and classroom preparation were rated from fair (4) to very good (2).

Language Arts Questionnaire: Level One. - Original grouping plans, program motivational potential, and the value of the teacher aides were rated as excellent (1) and/or very good (2). The questions referring to preparation and supervisory time, to availability of materials, and to the manner of assigning teacher-aides received lower ratings.

Mathematics Questionnaire: Level Two. - The Houghton Mifflin series provided more materials and flexibility. Lack of time had negative effects on both the Houghton Mifflin and the Addison-Wesley programs.

Teacher-aide's Questionnaire. - The teacher-aides felt both

essential to and comfortable in the continuous progress program. They asked for continued preparation, for more stable assignments, and for more involvement in teacher meetings.

Attitudinal Data

An expression of parent and pupil attitudes was obtained through three questionnaires:

Parent Questionnaire. - From 50% to 87% of the third level parents responded positively to questions concerning their children's attitudes, performance, and parent-teacher reporting procedures.

Pupil Questionnaire: Level Three. - An overwhelming number of third level pupils like the changes at Westwood and over 50% were happy with the staff and program.

Pupil Questionnaire: Level Four. - Over 60% of the fourth level pupils like the changes at Westwood and almost 50% expressed very positive attitudes toward the teachers and the school generally.

Source: Calmus, Mary Elise and Werner, M. Canice. *An Evaluation of the Individualized Instructional Program and the Differentiated Staffing Plan at Westwood School, Dayton, Ohio.* Dayton Public Schools, 1970, pp. 33-34.

Appendix D: Summary of Evaluation Report on the Multi-Unit School Project at Martin Luther King, Jr. School, Toledo.

Summary, Commendations, and Recommendations

Summary

During the 1969-70 school year, Martin Luther King, Jr. School developed into a functioning multi-unit school. Each major characteristic of a multi-unit school, as defined in the project, was attained during this year. Work tasks defined for the unit leaders, professional teachers, student teachers, student aides, unit teams, principal, curriculum specialists, and steering committee were mostly accomplished.

As a result of participation in Martin Luther King, Jr. School, student teachers and aides did have greater preferences for becoming full-time teachers in an inner city school. Also, they believed more often that they would have less difficulty and more enjoyment being teachers in an inner city school.

The staff of the multi-unit school examined and tried out new curriculums. The teachers in the units were given more responsibility and opportunity for planning the instructional content of their units. The university curriculum specialists stimulated new ideas and provided resource materials for use by the teachers in actually planning new instructional units.

New in-service education experiences were planned and conducted for the staff in Martin Luther King, Jr. School. Teachers requested a variety of in-service education programs. The university personnel and the project director were able to provide the resources needed to meet these requests.

Moderate success was achieved in helping students at Martin Luther King, Jr. School to make greater improvements in their academic achievement and positive attitudes toward school than did the students in a control school. The multi-unit school had a greater influence on achievement in reading in grades 4, 5, and 6 than did the control school. The influence of the control school on reading was greater in grade 2. Students in grades 1, 2, and 5 at King School responded more positively to validated items designed to measure attitudes toward school. Students in grade 6 in the control school responded more positively toward school

than the 6th graders at King School. The statistically significant data favored the multi-unit school more frequently than the control school but the magnitude of the differences was not large.

Extensive activities were carried out to inform people about King School and to demonstrate the functioning of a multi-unit school. Frequent visits were made by persons from other schools within Toledo public schools as well as individuals and groups from outside the Toledo district. Numerous speeches were made by the project staff in explaining the multi-unit organization.

The vast majority of the teachers in Martin Luther King, Jr. School had indicated that they preferred to teach in a multi-unit school rather than in a self-contained classroom. They believed that pupils benefited more from a multi-unit organization than a self-contained classroom. All but one teacher agreed that teachers learn more in a multi-unit because of the closer participation with other teachers. They also believed that teachers worked harder in a multi-unit school. With a few exceptions, the total teaching staff responded positively to the multi-unit school concept.

Most of the students communicated an intense pride in their school. The students in grades 1 and 2 reported "happy" feelings about school and learning. Fifth graders described their school most frequently by using nine "positive" adjectives and only one "negative" adjective from a check list. The majority of 4th, 5th, and 6th graders indicated favorable responses to inventory items related to school and learning.

Three unplanned outcomes were identified which appear to have resulted from the multi-unit school project. In comparing data from the multi-unit school and the control school, the multi-unit school had (1) more staff who were promoted to jobs of more responsibility or autonomy and fewer who requested transfer, (2) more parents who lived outside the school neighborhood and who requested that their children be permitted to attend the school, and (3) fewer students who were retained a second year in the same grade.

Source: Center for Educational Research and Services. *Evaluation Report on the Multi-Unit School Project at Martin Luther King, Jr. School.* College of Education, University of Toledo, October 1970, pp. 105-107.